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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|-------------|-----------------------|---------------------|------------------|
| 10/723,424 | 11/26/2003 | Mark J. Hampden-Smith | 41890-01626 | 6234 |
| 7590 11/03/2005 | | | EXAMINER | |
| Marsh Fischmann & Breyfogle LLP | | | VANOY, TIMOTHY C | |
| Suite 411 3151 South Vaughn Way | | | ART UNIT | PAPER NUMBER |
| Aurora, CO 80014 | | | 1754 | |

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
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| Office Action Commons | 10/723,424 | HAMPDEN-SMITH ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Timothy C. Vanoy | 1754 |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nety filed the mailing date of this communication. D (35 U.S.C. § 133). |
| Status | | |
| 1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allowar closed in accordance with the practice under E | action is non-final. nce except for formal matters, pro | • |
| Disposition of Claims | | |
| 4) Claim(s) 1-202 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 1-202 are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the objected to application to the objected to applicate the objected to be applicated to applicate the objected to be the correction of the objected to applicate the objected to be applicated to applicate the objected to applic | vn from consideration. election requirement. r. epted or b) objected to by the Edrawing(s) be held in abeyance. See | e 37 CFR 1.85(a). |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of the certified copies of the certified copies of the prior application from the International Bureau | s have been received. s have been received in Applicati ity documents have been receive i (PCT Rule 17.2(a)). | on No ed in this National Stage |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | |

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-98 (group I), drawn to a method, classified in class 423, subclass
 648.1+.
- II. Claims 99-110 and 135-148 (group II), drawn to a catalyst and method for making the same, classified in class 502, subclass 100+.
- III. Claims 111-134 and 149-202 (group III), drawn to a particulate composite material and method for making the same, classified in class 502, subclass 400+.

The inventions are distinct, each from the other, because the inventions set forth in claims 99-110 and 135-148 (group II) and claims 1-98 (group I) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used for another and materially different process, such as a process for cleaning the exhaust gas emitted from a diesel engine.

The inventions are distinct, each from the other, because the inventions set forth in claims 111-134 and 149-202 (group III) and claims 1-98 (group I) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be

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practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used for another and materially different process such as a process for filtering particulates out of a fluid.

The inventions are distinct, each from the other, because the inventions set forth in claims 99-110 and 135-148 (group II) and claims 111-134 and 149-202 (group III) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because each group of claims is capable of supporting its' own patent without requiring the claims of the other non-selected group. The subcombination has separate utility such as the utility of promoting the steam-reformation of a hydrocarbon (as set forth in the claims of group II) which is distinct and apart from the utility of sorbing carbon dioxide (as set forth in the claims of group III).

Because these inventions are distinct for the reasons given above and the claims set forth in groups I, II and III have acquired a separate status in the art as shown by their different classification; the search required for any selected group of claims is not required for the other non-selected group of claims, and the claims set forth in groups I,

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Il and III have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

The Applicants are advised that in order for their reply to this requirement to be considered complete, it must include an election of the invention to be examined - even though this requirement may be traversed (37 CFR 1.143).

The Applicants are reminded that upon the cancellation of claims to a nonelected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy C. Vanoy whose telephone number is 571-272-8158. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy Vanoy
Patent Examiner

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